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Remarks

Thorough examination by the Examiner is noted and appreciated.

The claims 1 and 11 have been amended in accordance with Examiners suggestions/requirements. Minor amendments have also been made including adding a semicolon inadvertently deleted and a comma inadvertently left out of claim 1.

Support for the new claims is found in the original claims and/or Specification. No new matter has been entered.

Claim Rejections under 35 USC 112

Claims 1-10 stand rejected under 35 USC Section 112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as their invention.

Claim 1 has been amended to make clear there is only one conductive region.

Applicants however, have amended claim 11 in accordance with Examiners suggestion/requirement to recite the limitation "excluding active chip portions" in claim 11 as required by Examiner, thereby overcoming this portion of Examiners rejection.

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Applicants have also amended claim 11 to make the claim consistent with Applicants claim 1.

Claims 1-22 are rejected under 35 USC Section 112, first paragraph, as failing to comply with the written description requirement.

Claim 1 has been amended to recite "the underlying conductive regions" in accordance with Examiners suggestion/requirement, making it clear only one conductive region is recited in the claim thereby overcoming Examiners rejection.

Further with respect to claim 1, Examiner states that the claim as previously presented required the underlying conductive area to be in communication with the metal seed layer. Applicants respectfully point out the following portions of Applicants Specification e.g., at paragraph:

"According to the present invention, the cathode contact areas include vias and/or trench lines, preferably filled with copper, formed in an insulating (IMD) layer underlying the copper pads. By the use of the term copper herein is meant copper or alloys thereof. The vias and/or trench lines are in electrical contact with an underlying conductive layer, also preferably copper. The cathode contact area is in electrically conductive communication with the central portion of the semiconductor area which includes the active devices, for example dual damascene structures, as discussed with reference to

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Figures 1A 1D, including a seed layer.

and at paragraph 0038:

"Referring to Figure 3B, the etched openings, e.g., 306A, 306B, 306C, may have a metal seed layer 312, for example copper, formed substantially conformally over the barrier layer 310 to facilitate electrodeposition of a metal, for example copper, to fill in the etched openings e.g., 306A, 306B, 306C, to form vias and/or trench lines. Alternatively, the etched openings e.g., 306A, 306B, 306C, may be filled with conventional PVD, CVD or metal flow processes."

and at paragraph 0040:

"The cathode contact areas may be formed in parallel with active device area features in the central portion of the semiconductor wafer or may be formed separately therefrom."

Therefore it is clear that the metal seed layer for carrying out an electrodeposition process over the central portion may be formed separately from formation of the cathode contact areas which need not be formed by an electroplating process, therefore not requiring that the conductive layer be in electrical communication with a metal seed layer when formed, merely that it be for electrical communication with a central portion including a metal seed layer for carrying out a subsequent electrodeposition process over the central portion as described and enabled in the Specification and as recited in claim 11.

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In an effort to overcome Examiners rejection and comply with Examiners requirement, Applicants have amended claim 1 including the limitation for electrical communication with a metal seed layer comprising the central portion.

The Claims have amended in accordance with Examiners suggestions/requirements. A favorable consideration of Applicants' claims is respectfully requested.

Based on the foregoing, Applicants respectfully submit that the Claims are now in condition for allowance. Such favorable action by the Examiner at an early date is respectfully solicited.

In the event that the present invention as claimed is not in a condition for allowance for any other reasons, the Examiner is respectfully invited to call the Applicants' representative at his Bloomfield Hills, Michigan office at (248) 540-4040 such that necessary action may be taken to place the application in a condition for allowance.

Respectfully submitted,



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